80. The enlarged translucent map **80** represents the printed map or other fixed media component of the system. The light box **82** is divided into separate light compartments **84** each with its own light source **85** controlled by the back light controller **251** and analog output interface **250** previously shown in FIG. **7**. Selective back lighting or illumination can be used to highlight a relevant or selected grid quadrangle for example for tracking a vehicle of a fleet of vehicles. A smaller back lighted map book **88** is also shown. Step **447** of TABLE IV provides the analog or projected outputs.

A communications application of the CAMLS system for an accident location and response system is illustrated in FIGS. **14**A–**14**D. As shown in FIG. **14**A an in-vehicle alarm system **90** is actuated by the accident impact of vehicle **92**. The in-vehicle alarm system **90** can be actuated e.g. by means of an airbag type sensor. The alarm system transmits GPS type position data along with an emergency signal indication to a central dispatch office **94** illustrated in FIG. **14**B. This is an example of the optional display routines set forth in steps **449** & **459** of TABLE IV.

The central dispatch office **94** receives the emergency signal and displays location of the accident based on transmitted GPS data on a desktop monitor **95** and on a backlighted wall map **80** of the type illustrated in FIG. **13**. The central office can of course make a hardcopy from a printer for record keeping purposes or for circulation. The central dispatch **94** also transmits the accident location data to a tow truck equipped with a CAMLS pager type receiver **96** illustrated in FIG. **14**C, an example of step **445** of TABLE IV. Alternatively the tow truck may incorporate an in-vehicle FAX machine for downloading a map of the accident scene.

The tow truck pager **96** receives the accident location data and displays it in the form of extended text and name along with characterization of the emergency. The tow truck operator uses the extended grid quadrangle name with a CAMLS printed map **98** to ascertain the location of the accident.

According to an alternative embodiment illustrated in FIG. **14**D a police officer or other witness to the accident uses a CAMLS PDA **100** either with GPS for automatically geocoding the accident location, or without GPS manually geocoding the accident scene. The accident location data is then communicated via wireless communications link such as an FM communications link to the central dispatch office **94** of FIG. **14**B. The police officer may at the same time be correlating the grid quadrangle of the accident location shown on the PDA display with a corresponding grid quadrangle of a CAMLS printed map providing additional information about the accident scene.

In the case of manual geocoding, the PDA can be programmed to place a cursor at the accident location. The user then pushes a geocode button for geocoding the accident scene by latitude and longitude coordinate location and grid quadrangle name or gridname of the grid quadrangle in which the accident scene is located.

According to a further alternative embodiment illustrated in FIG. **14**E the locus of the accident is geocoded by hand by a witness or observer of the accident. The witness or observer **100** marks the locus of the accident with a pen or pencil **102** on a CAMLS printed map **104**. The printed map **104** is of course encoded with the grid quadrangles of the CAMLS grid system for identifying the location of the accident by gridname. As shown on the watch of observer **100** the accident location is geocoded by hand with a pen at approximately 3 P.M.

Subsequently at 5 P.M. a handheld scanner device **106** is used to digitize the geocoded accident location into a CAMLS computer system such as a desktop computer system **108** equipped with CAMLS software as shown in FIG. **14**F. The accident scene and geographical location can then be displayed on the computer display **110**, stored in the computer database, and printed out by printer **112** all under the control of the CAMLS software. This is an example of steps **357** and **361**, of TABLE I and step **371** of TABLE II.

While the invention has been described with reference to particular example embodiments it is intended to cover all modifications and equivalents within the scope of the following claims.

We claim:

1. A computer aided map location system (CAMLS) for assisting a user in map reading and map use comprising:

at least one printed map corresponding to a selected geographical area, said printed map depicting surface features at a particular level of detail, said printed map comprising grid lines substantially parallel with coordinate lines of a selected geographical coordinate system, said grid lines defining boundary lines of printed map grid quadrangles identified by printed map grid quadrangle names;

a first computer means having a display, said first computer means being programmed to display on said display selected display grid quadrangles identified by first display grid quadrangle names corresponding to said printed map grid quadrangle names;

at least one database of selected geographical-coordinate-locatable objects (loc/objects) storable on a memory device and readable by said first computer means, said selected loc/objects identified by geographical coordinate location in said selected geographical coordinate system, said first computer means being programmed to display on said display locations of one or more of said selected loc/objects in said display grid quadrangles corresponding to map locations of said selected loc/objects in said printed map grid quadrangles of said printed map;

a second computer means having an output programmed to indicate second grid quadrangles names for user correlation with corresponding printed map grid quadrangles.

2. The CAMLS as claimed in claim **1** wherein said second computer means includes a second display, said second computer means being programmed to display on said second display selected grid quadrangles identified by said second display grid quadrangle names for user correlation with corresponding printed map grid quadrangles;

and a data communications link between said first computer means and said second computer means.

3. The CAMLS as claimed in claim **1** wherein said second computer means is located at a location remote from said first computer means, said second computer means having at least one database of loc/objects, and said CAMLS includes a data communications link between said first computer means and said second computer means.

4. The CAMLS as claimed in claim **1** further comprising locating means couplable to said first computer means, to said second computer means, or to both.

5. The CAMLS as claimed in claim **4** wherein said locating means is a Global Positioning System (GPS) receiver.

6. A computer aided map location system (CAMLS) comprising:

a first set of printed maps corresponding to selected geographical areas, said first set of printed maps depict-